Table 2. Maricopa County Economic Forecasts (Annual Averages, in Thousands)

	1988	Growth Rate	1989	Growth Rate	1990	Growth Rate
Labor Force	1,027.7	2.7%	1,066.8	3.8%	1,105.2	3.6%
Unemployed	52.6	0.6	51.2	-2.7	57.5	12.3
Unemployment Rate	5.1%		4.8%		5.2%	
Total Employment	975.1	2.8	1,015.6	4.2	1,047.7	3.2
Total Wage and Salary Employment	931.3	1.9	941.4	1.1	963.4	2.3
Manufacturing	138.3	1.9	139.0	0.5	141.4	1.7
Mining	0.7	16.7	0.8	14.3	0.9	12.5
Construction	64.6	-7.6	61.1	-5.4	61.6	0.8
TCPU*	50.3	2.4	50.5	0.4	51.4	1.8
Trade	235.7	1.8	241.8	2.6	247.2	2.2
FIRE**	74.3	-0.8	73.2	-1.5	74.6	1.9
Services	243.9	5.1	248.5	1.9	257.5	3.6
Government	123.6	3.0	126.5	2.3	128.8	1.8

* TCPU = Transportation, Communications, and Public Utilities.
** FIRE = Finance, Insurance, and Real Estate.

NOTES: Totals may not add due to rounding.

SOURCE: Arizona Department of Economic Security, Research Administration, August 1989.

(Continued from page 9)
nondurable-goods manufacturing sectors, such as food processing, apparel, printing and publishing, chemicals, and "other nondurables."

The construction-associated manufacturing industries of lumber and wood products; and stone, clay, and glass will lose employment in 1989. Aircraft and missile manufacturing businesses lost employment in 1988 after national defense budgets were cut, but in 1989 there will be growth of about 300 jobs in those companies. The other component of high-tech manufacturing -- electrical and nonelectrical machinery -- will lose about 500 jobs over the year.

The outlook for manufacturing in 1990 is one of expected improvement, with gains up to 2,400 jobs and most of the growth in the durable goods sectors.

A former stalwart of Phoenix-area growth currently is not so vigorous. Services will add only 4,600 jobs in 1989, down from 11,900 in 1988, a rate of gain of only 1.9 percent.

The industry component most responsible for the slowing is business services, which will actually lose a 100 workers in 1989. Until recently, the temporary-help component of business services was a major contributor to services growth. Indeed, many manufacturing firms were substituting temporary help in lieu of new hires. This year, manufacturing firms have had waning need for additional help. Slowing growth in business services is another manifestation of diminished manufacturing growth.

Another cause of services' growth recession is fewer openings of new hotels in Maricopa County.

The hotel and motel industry grew at better than 13 percent rates in both 1987 and 1988. This year will see hotel and motel sector growth re-

(Continued on page 11)

Pima County Mirrors State; Cutbacks in Manufacturing, Construction Slow Job Growth

In March, DES, Research Administration (RA), predicted Pima County was going to have slow annual wage and salary employment growth of 1.2 percent. But with six months of data in for 1989, it appears that economic activity will be somewhat slower than expected with employment growth of 1.0 percent.

Next year, the Pima County economy will gradually improve as the manufacturing industry absorbs major cutbacks in employment by a few local producers and the construction industry shows some vitality. The improvement, however, will depend on the future course of inflation.

If the Federal Reserve Bank, through its monetary policy, is able to keep

... FORECAST UPDATE ...

inflation and interest rates at low levels, Pima County's construction industry should see some positive growth in employment. (See "Inflation Expected to Control Fate of State's Economy," p. 2.)

In 1990, RA forecasts that wage and salary employment will grow 2.2 percent, which is more than twice the growth rate in either 1988 or 1989.

Total wage and salary employment grew 1.1 percent in the first six months of 1988. Despite the slower growth of payroll jobs, total employment based on place of residence grew a healthy 5.0 percent during the first six months of 1989. (Residence-based employment includes full-time and part-time workers, people working for a family business without pay, and agricultural employees.) During the same time, the

(Continued on page 12)

Maricopa County Economy Expected to Improve Slightly in '90

(Continued from page 10)

duced to 6.3 percent as the last of the major hotels are completed. Next year, there will be a further reduction -- to only a 4.0 percent growth rate.

Also, in response to local efforts to control costs of medical services, the health services' growth rate will decline to 1.0 percent in 1989 from 5.3 percent in 1988.

Trade gets credit for assuring that the Phoenix area will have some overall employment growth this year. Trade businesses will add 6,100 jobs on an annual-average basis in 1989.

Thanks to the grocery-chain wars there will be healthy employment growth -- about 4.67 percent -- among food stores. Eventually, however, there will be some casualties as new-entrant stores succeed in or withdraw from the Phoenix market. Next year will see a much-reduced growth rate in food stores -- to about 2.2 percent.

Automotive stores, too, will experience substantial gains (6.1 percent) in 1989, followed by reduced gains in 1990 (2.2 percent).

Government will also grow this year, but at a budget-restrained rate of 2.3 percent. RA expects additional restraint in 1990, with growth of 1.8 percent. Still, two-year growth in government represents 5,200 new jobs.

--Ron Simon
RA Economic Analysis Manager

(Continued from page 11)
total number of unemployed fell 3.8 percent, resulting in a decline in the unemployment rate.

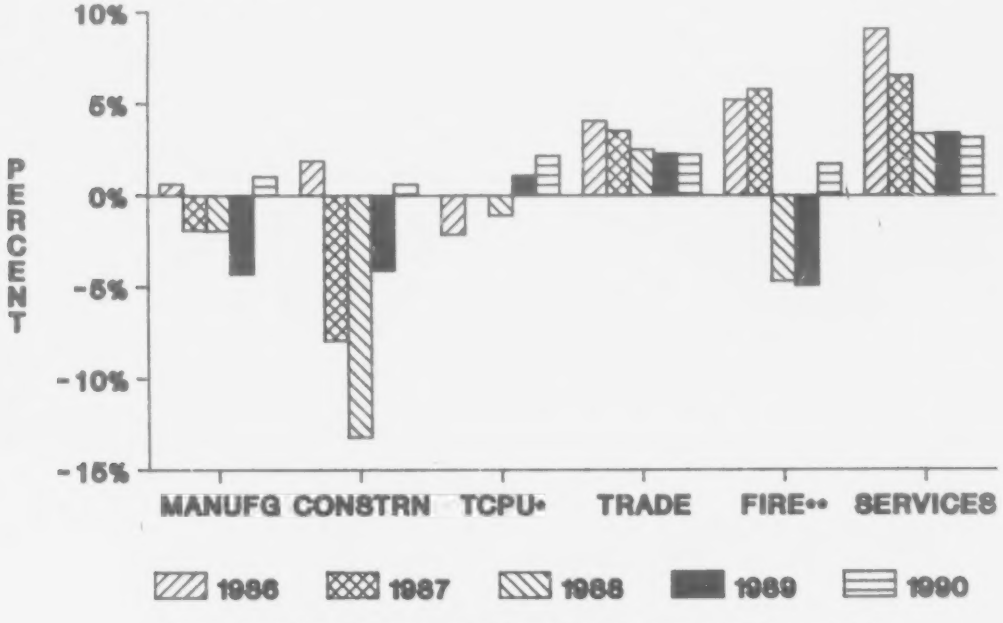
RA forecasts that in 1989, on an annual-average basis, total resident employment will increase 13,900 and total number of unemployed will fall 200, resulting in an annual-average unemployment rate of 4.9 percent, slightly lower than a rate of 5.1 percent in 1988. RA expects the unemployment rate, however, to increase to 5.3 percent in 1990 as more residents start looking for jobs. (See "Doldrums in Manufacturing, Construction ...," p. 3)

(Despite the small increase in wage and salary employment, the Tucson metropolitan area's economy is diversified and stable enough to avoid severe problems. To illustrate, in the last year the Tucson economy underwent some major upheaval in its manufacturing industry (see below). If the economy was not balanced, the decline in manufacturing employment would have brought a decline in total wage and salary employment. In addition, between 1970 and June 1989, Pima County's share of state manufacturing employment has gone up nearly 5.0 percent. In the same period, Maricopa County's share has declined about 4.0 percent.)

Slow Tucson-area economic growth in 1989 is due in part to job losses in the manufacturing and construction industries. Manufacturing is expected to decline 4.3 percent in 1989, or about 1,300 jobs.

The durable goods sector of manufacturing will decline an even larger rate -- 6.5 percent, or about 1,600 jobs. Most of the antiipated job losses in this sector are the result of announced cutbacks in the machinery and defense-related

(Continued on page 19)



*TCPU = TRANSPORTATION, COMMUNICATIONS, AND PUBLIC UTILITIES
**FIRE = FINANCE, INSURANCE, AND REAL ESTATE

Figure 6. Pima County Employment Growth Rates in Selected Industries, 1981-1990

Youth Join U.S. Work Force in Record Numbers in July

For the second consecutive summer, record proportions of youths were in the labor force and employed in July, the Bureau of Labor Statistics of the U.S. Department of Labor reports.

The proportion of 16-to-24 year olds in the labor force in July -- the peak month for summer work activity -- was 77.5 percent, and the proportion actually employed was 69.2 percent. The youth unemployment rate in July was 10.7 percent, about the same as a year earlier. Both unemployment rates were lower than at any time in the prior two decades.

Between April and July each year, the number of 16-to-24 year olds in the labor force grows rapidly as large numbers of high school and college students search for temporary summer jobs and recent graduates look for permanent employment. This summer, the youth labor force expanded nearly 3.7 million, about the same as last year.

The proportion of youths working or looking for work -- the labor force participation rate -- reached a record high of 77.5 percent in July, exceeding the previous high attained last summer. However, due to the continuous decline of the youth population, the actual number of young workers in the labor force, 25.0 million, was 390,000 lower than in July 1988.

Once again this summer, the labor force participation rate for young women was at a new high, rising to 72.4 percent in July. Black youths also increased their labor force activity, as their participation rate was up nearly 2.5 percentage points over the year to 68.1 percent.

The rate of joblessness for young black workers of 22.8 percent was at its lowest mark since 1972. Nonetheless, black youths were still two-and-a-half times more likely than white youths to be unemployed. The jobless rate for whites was 8.9 percent.

--U.S. Department of Labor, Bureau of Labor Statistics

The Arizona Labor Force in July

Arizona's unemployment rate continued to climb in July, returning to 5.6 percent, nearly its level at the first of the year. May's drop in the unemployment rate to 5.0 percent was indeed an aberration, unsustained in level or direction.

Total unemployment increased 6,400, the largest July increase since 1981. Both total employment and wage and salary jobs decreased seasonally; total employment by 14,700 and wage and salary employment by 17,000.

The greatest part of the job loss occurred in government, especially in schools. On average, school employment drops 14.5 percent in July, and this July was on target with losses of 13,100 jobs statewide. The seasonal decline is primarily among colleges and universities. In addition, federal government dropped slightly more than seasonally.

Besides government, seasonal reductions accounted for most of job declines among industries, including mining, eating and drinking places, and hotels. However, the magnitude of those losses was less than average for July. Transportation and services each lost a bit more (200) than average, especially "other services," which includes agricultural, personal, amusement/recreational, legal, repair, and miscellaneous services.

Construction gets the most points for improvement in July. Not only did construction record its third consecutive month of employment gain, but the 900 jobs added was three-and-a-half times the average July gain in Arizona since the 1982 recession.

(Continued on page 18)

Arizona Labor Force and Employment

July 1989 (in thousands)

	ARIZONA				
				Amount Change	
	July* 1989	June 1989	July 1988	June-July	1988-1989
TOTAL CIVILIAN LABOR FORCE**	1721.6	1729.9	1657.1	-8.3	+64.5
Total Unemployment	104.8	98.4	117.7	+6.4	-12.9
Rate	6.1	5.7	7.1	----	----
Rate (Sea. Adj.)***	5.6	5.2	6.4	----	----
Total Employment	1616.8	1631.5	1539.4	-14.7	+77.4

The Above Labor Force Statistics Should

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

TOTAL WAGE AND SALARY	1395.2	1412.2	1376.2	-17.0	+19.0
Manufacturing	189.5	189.6	191.0	-0.1	-1.5
Durable Goods	144.8	144.7	147.8	+0.1	-3.0
Stone, Clay, and Glass	7.6	7.4	7.8	+0.2	-0.2
Primary and Fabricated Metals	15.7	15.8	15.6	-0.1	+0.1
Primary Metals	7.4	7.5	7.4	-0.1	+0.0
Fabricated Metals	8.3	8.3	8.2	+0.0	+0.1
Machinery	64.0	64.1	66.8	-0.1	-2.8
Other Durable Goods	57.5	57.4	57.6	+0.1	-0.1
Aircraft and Missiles	26.0	25.7	26.4	+0.3	-0.4
Lumber and Wood Product (Excluding Furniture)	8.6	8.7	8.5	-0.1	+0.1
All Other Durable Goods	22.9	23.0	22.7	-0.1	+0.2
Nondurable Goods	44.7	44.9	43.2	-0.2	+1.5
Food and Kindred Products	9.8	9.8	9.3	+0.0	+0.5
Apparel	4.5	4.5	4.5	+0.0	+0.0
Printing and Publishing	16.9	16.9	16.8	+0.0	+0.1
All Other Nondurable Goods	13.5	13.7	12.6	-0.2	+0.9
Mining and Quarrying	12.0	12.1	12.2	-0.1	-0.2
Copper Mining	9.1	9.1	9.0	+0.0	+0.1
Other Mining and Quarrying	2.9	3.0	3.2	-0.1	-0.3
Construction	91.8	90.9	95.2	+0.9	-3.4
Trans., Communications, & Public Utilities.	72.8	73.1	72.0	-0.3	+0.8
Transportation	37.7	37.9	36.2	-0.2	+1.5
Communications and Public Utilities	35.1	35.2	35.8	-0.1	-0.7
Trade	356.3	359.4	343.0	-3.1	+13.3
Wholesale Trade	69.1	69.8	66.9	-0.7	+2.2
Retail Trade	287.2	289.6	276.1	-2.4	+11.1
General Merchandise and Apparel	44.2	45.0	42.0	-0.8	+2.2
Food Stores	48.3	48.0	46.1	+0.3	+2.2
Automotive and Service Stations	36.2	36.0	34.2	+0.2	+2.0
Eating and Drinking Places	99.6	100.8	96.6	-1.2	+3.0
Other Retail Trade	58.9	59.8	57.2	-0.9	+1.7
Finance, Insurance, and Real Estate	92.0	92.0	93.2	+0.0	-1.2
Services and Miscellaneous	366.4	368.1	359.1	-1.7	+7.3
Hotels and Other Lodging Places	41.4	42.3	38.8	-0.9	+2.6
Business Services	77.3	76.9	77.4	+0.4	-0.1
Health Services	92.6	92.3	91.4	+0.3	+1.2
Other Services	155.1	156.6	151.5	-1.5	+3.6
Government	214.4	227.0	210.5	-12.6	+3.9
Federal	42.8	42.5	43.6	+0.3	-0.8
State and Local	171.6	184.5	166.9	-12.9	+4.7
School	76.5	89.6	76.0	-13.1	+0.5

* Preliminary

** Labor force, unemployment, and employment are reported by place of residence.

*** Normal seasonal variations have been eliminated to reflect underlying economic trends.

July 1989 (in thousands)

MARICOPA COUNTY					PIMA COUNTY				
			Amount Change					Amount Change	
July* 1989	June 1989	July 1988	June-July	1988-1989	July* 1989	June 1989	July 1988	June-July	1988-1989
1074.1	1076.5	1037.7	-2.4	+36.4	322.4	326.8	308.0	-4.4	+14.4
51.3	48.5	55.4	+2.8	-4.1	15.7	15.6	17.0	+0.1	-1.3
4.8	4.5	5.3	---	---	4.9	4.8	5.5	---	---
4.6	4.3	5.2	---	---	4.7	4.6	5.3	---	---
1022.8	1028.0	982.3	-5.2	+40.5	306.7	311.2	291.0	-4.5	+15.7

at Be Used for Economic Assistance Programs

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK

923.5	933.7	916.7	-10.2	+6.8	240.8	246.3	237.0	-5.5	+3.8
139.1	139.1	139.1	+0.0	+0.0	28.4	28.7	30.4	-0.3	-2.0
107.8	107.6	108.8	+0.2	-1.0	22.5	22.7	24.6	-0.2	-2.1
4.7	4.7	5.2	+0.0	-0.5					
10.4	10.4	10.3	+0.0	+0.1					
52.4	52.2	53.3	+0.2	-0.9					
40.3	40.3	40.0	+0.0	+0.3					
31.3	31.5	30.3	-0.2	+1.0	5.9	6.0	5.8	-0.1	+0.1
6.3	6.3	6.1	+0.0	+0.2					
3.5	3.5	3.4	+0.0	+0.1					
11.9	11.9	11.9	+0.0	+0.0					
9.6	9.8	8.9	-0.2	+0.7					
0.8	0.8	0.7	+0.0	+0.1	2.1	2.1	1.8	+0.0	+0.3
61.5	60.9	65.6	+0.6	-4.1	16.8	16.9	17.1	-0.1	-0.3
50.6	51.0	50.0	-0.4	+0.6	9.5	9.5	9.1	+0.0	+0.4
27.3	27.6	26.4	-0.3	+0.9	4.9	4.9	4.7	+0.0	+0.2
23.3	23.4	23.6	-0.1	-0.3	4.6	4.6	4.4	+0.0	+0.2
240.0	242.5	232.6	-2.5	+7.4	58.2	58.5	56.5	-0.3	+1.7
56.0	56.3	54.0	-0.3	+2.0	7.2	7.2	7.1	+0.0	+0.1
184.0	186.2	178.6	-2.2	+5.4	51.0	51.3	49.4	-0.3	+1.6
27.3	27.8	27.0	-0.5	+0.3	7.6	7.8	7.2	-0.2	+0.4
31.4	31.1	29.4	+0.3	+2.0	8.1	7.9	8.1	+0.2	+0.0
23.1	23.1	21.6	+0.0	+1.5	5.6	5.6	5.7	+0.0	-0.1
62.9	64.3	62.0	-1.4	+0.9	18.3	18.4	17.7	-0.1	+0.6
39.3	39.9	38.6	-0.6	+0.7	11.4	11.6	10.7	-0.2	+0.7
73.4	73.4	74.3	+0.0	-0.9	11.6	11.6	12.3	+0.0	-0.7
244.4	246.4	242.9	-2.0	+1.5	69.1	69.0	66.3	+0.1	+2.8
23.7	24.5	22.0	-0.8	+1.7	6.4	6.7	6.2	-0.3	+0.2
60.3	60.6	61.3	-0.3	-1.0	11.7	11.1	11.4	+0.6	+0.3
59.8	59.6	59.9	+0.2	-0.1	20.2	20.1	19.5	+0.1	+0.7
100.6	101.7	99.7	-1.1	+0.9	30.8	31.1	29.2	-0.3	+1.6
113.7	119.6	111.5	-5.9	+2.2	45.1	50.0	43.5	-4.9	+1.6

NOTE: Prepared by the Arizona Department of Economic Security, Research Administration, in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Nonmetropolitan Counties
Labor Force and Employment
May 1989

	Apache	Cochise	Coco-nino	Gila	Graham	Green-lee	La Paz
CIVILIAN LABOR FORCE*	14,150	35,550	44,375	13,100	8,975	2,900	6,050
Total Unemployment	2,875	2,400	3,550	1,225	700	250	425
Rate	20.3%	6.8%	8.0%	9.4%	7.8%	8.6%	7.0%
Rate (Seas. Adj.)**	14.4%	6.9%	6.7%	9.7%	7.5%	7.9%	7.2%
Total Employment	11,275	33,150	40,825	11,875	8,275	2,650	5,625
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS							
TOTAL WAGE AND SALARY	13,875	24,300	38,550	10,725	5,375	2,650	3,625
Manufacturing	925	1,250	3,150	1,375	200	50	350
Mining & Quarrying	50	125	150	1,300	0	1,550	75
Construction	975	875	1,925	600	225	175	225
T.C.P.U.	1,700	1,525	2,275	375	175	50	75
Trade	1,650	5,750	10,000	2,250	1,500	225	1,225
F.I.R.E.	375	675	950	275	100	25	100
Services & Misc.	4,475	4,850	11,125	2,175	900	125	900
Government	3,725	9,250	8,975	2,375	2,275	450	675

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
CIVILIAN LABOR FORCE*	33,825	27,575	38,800	11,425	39,300	49,025
Total Unemployment	1,650	3,700	3,050	2,000	2,200	13,750
Rate	4.9%	13.4%	7.9%	17.6%	5.6%	28.0%
Rate (Seas. Adj.)**	5.1%	10.8%	7.2%	12.6%	5.9%	17.1%
Total Employment	32,175	23,875	35,750	9,425	37,100	35,275
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS						
TOTAL WAGE AND SALARY	22,425	20,325	28,725	9,425	25,275	25,550
Manufacturing	2,625	2,100	4,175	1,275	2,400	2,075
Mining & Quarrying	175	1,175	3,675	0	775	50
Construction	1,875	1,225	1,400	350	2,250	1,425
T.C.P.U.	1,225	1,800	950	550	1,000	1,050
Trade	7,100	4,450	5,275	3,725	7,300	7,575
F.I.R.E.	1,050	400	775	275	1,000	950
Services & Misc.	5,475	5,375	3,900	1,600	6,100	5,925
Government	2,900	3,800	8,575	1,650	4,450	6,500

* Adjusted to the Current Population Survey (CPS) to reflect place of residence.
** Seasonal adjustment not applicable for economic assistance programs.

T.C.P.U. = Transportation, Communications, and Public Utilities
F.I.R.E. = Finance, Insurance, and Real Estate

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Estimated Hours and Earnings of Production Workers in Selected Industries Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	July* 1989	June 1989	July 1988	July* 1989	June 1989	July 1988	July* 1989	June 1989	July 1988
Manufacturing	407.64	405.78	407.36	40.4	40.7	40.9	10.09	9.97	9.96
Aircraft & Missiles	616.03	601.20	INA	44.9	44.5	INA	13.72	13.51	INA
Food & Kindred Prod.	347.60	337.98	342.95	39.5	39.3	40.3	8.80	8.60	8.51
Primary Metals	516.62	512.45	503.62	37.6	38.1	38.8	13.74	13.45	12.98
Machinery	386.51	396.81	407.13	39.4	39.8	41.0	9.81	9.97	9.93
Copper Mining	565.34	562.72	527.10	45.3	44.1	42.0	12.48	12.76	12.55
Construction	436.60	429.16	428.70	37.0	36.4	36.3	11.80	11.79	11.81
Utilities	710.21	669.98	638.73	41.9	41.9	42.3	16.95	15.99	15.10
Retail Trade**	256.96	253.01	249.83	33.9	33.6	33.4	7.58	7.53	7.48
Wholesale Trade	390.25	371.72	395.18	39.7	38.6	39.4	9.83	9.63	10.03

Estimated Hours and Earnings of Production Workers in Selected Industries Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	July* 1989	June 1989	July 1988	July* 1989	June 1989	July 1988	July* 1989	June 1989	July 1988
Manufacturing	431.26	428.48	433.87	40.8	41.2	41.4	10.57	10.40	10.48
Construction	451.33	446.49	443.72	37.3	36.9	36.4	12.10	12.10	12.19
Retail Trade**	276.85	269.26	274.63	35.0	34.3	34.2	7.91	7.85	8.03
Wholesale Trade	404.00	389.22	421.30	40.0	39.0	40.2	10.10	9.98	10.48

Estimated Hours and Earnings of Production Workers in Selected Industries Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	July* 1989	June 1989	July 1988	July* 1989	June 1989	July 1988	July* 1989	June 1989	July 1988
Manufacturing	364.43	358.13	377.67	38.2	37.5	39.3	9.54	9.55	9.61
Copper Mining	635.55	583.14	606.39	44.6	43.1	43.5	14.25	13.53	13.94
Construction	397.94	389.71	385.61	37.4	36.8	36.9	10.64	10.59	10.45
Utilities	585.63	581.98	587.44	40.5	41.1	41.9	14.46	14.16	14.02

* Preliminary.

** Exeudes eating and drinking places.

Note: These estimates are based on a sample of full- and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month. Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs July 1989

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,721,653	1,616,822	104,831	6.1%
Apache	14,163	11,282	2,881	20.3
Cochise	35,554	33,146	2,408	6.8
Coconino	44,376	40,835	3,541	8.0
Gila	13,107	11,874	1,233	9.4
Graham	8,973	8,269	704	7.8
Greenlee	2,893	2,649	244	8.4
La Paz	6,059	5,628	431	7.1
Maricopa	1,074,104	1,022,832	51,272	4.8
Mohave	33,824	32,173	1,651	4.9
Navajo	27,572	23,877	3,695	13.4
Pima	322,430	306,686	15,744	4.9
Pinal	38,821	35,761	3,060	7.9
Santa Cruz	11,437	9,430	2,007	17.5
Yavapai	39,296	37,099	2,197	5.6
Yuma	49,043	35,281	13,762	28.1

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators.

NOTE: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

The Arizona Labor Force in July

(Continued from page 13)

Arizona manufacturing dragged through another month, losing 100 jobs and bringing the over-the-year loss to 1,500 jobs. Most of this year's loss came at the expense of Pima County where several major employers terminated operations. The only sectors that showed July improvement were aircraft and missiles; and stone, clay, and glass.

Trade lost employment in July as it has in July of each of the past eight years. However, the 1989 decline of 900 was less than average for post-recession years. Over-the-year growth in trade at 3.9 percent (13,300 jobs) has been positive.

Services also declined in July but, like trade, much less than average during the post-recession period. Services still stands at a 2.0 percent growth rate, or 7,300 jobs over the year, about half of last year's growth.

The state's highest county unemployment rate was again in Yuma County (17.1 percent) where agricultural activity was at a summer low. However, the effects of recent flooding will not be apparent until August's statistics are released. The lowest nonmetropolitan county rate was in Mohave County (5.1 percent) where growth in Bullhead City, and Laughlin, Nevada, across the Colorado River, has provided ample employment opportunities.

--Ron Simon
RA Economic Analysis Manager

Table 3. Pima County Economic Forecasts (Annual Averages, in Thousands)

	1988	Growth Rate	1989	Growth Rate	1990	Growth Rate
Labor Force	311.9	1.6%	325.6	4.4%	336.3	3.3%
Unemployed	16.0	2.6	15.8	-1.2	17.8	12.7
Unemployment Rate	5.1%		4.9%		5.3%	
Total Employment	295.9	1.5	309.8	4.7	318.5	2.8
Total Wage and Salary Employment	247.1	0.9	249.5	1.0	255.0	2.2
Manufacturing	30.4	-1.9	29.1	-4.3	29.4	1.0
Mining	1.8	12.5	2.1	16.7	2.2	4.8
Construction	17.1	-13.2	16.4	-4.1	16.5	0.6
TCPU*	9.1	-1.1	9.2	1.1	9.4	2.2
Trade	57.0	2.5	58.3	2.3	59.6	2.2
FIRE**	12.2	-4.7	11.6	-4.9	11.8	1.7
Services	67.5	3.4	69.8	3.4	72.0	3.2
Government	51.9	4.2	53.0	2.1	54.1	2.1

*TCPU = Transportation, Communications, and Public Utilities.
**FIRE = Finance, Insurance, and Real Estate.

NOTES: Totals may not add due to rounding.

SOURCE: Arizona Department of Economic Security, Research Administration, August 1989.

Construction, Manufacturing Losses Slow Growth in Pima County

(Continued from page 12)

industries (e.g., International Business Machines and Hughes Aircraft Corp.). The decline in employment in these industries will continue through the end of this year, but there should be enough improvement in 1990 to register employment growth of 200 jobs.

The nondurable-goods sector, on the other hand, is expected to add 100 jobs in 1989 with most of the jobs coming from the printing and publishing, and food processing sectors. RA forecasts that the nondurable-goods sector will add about 200 jobs in 1990.

Another reason for Pima County's slow economic growth is the continuation of the slide in the construction industry that started in the middle of 1986. Construction has experienced some renewed growth in the last few months, adding a few hundred jobs. Most of the gains, however, could be regarded as seasonal.

RA contends that new activity will not be sufficient to call for an end of the construction doldrums this year. In 1989, employment in construction will decline 4.1 percent, or 700 jobs.

The outlook for construction depends first on how fast existing space is absorbed, and second on the level of interest rates. Relatively low interest rates will somewhat reinvigorate the industry as investors find it profitable to infuse new capital into projects. Similarly, the buyers of single-family houses will also be attracted by low mortgage rates.

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If the Federal Reserve continues its policy of easy credit, interest rates will stay at low levels in the near future. With a reasonable assumption of low inflation and interest rates, Pima County construction is expected to turn around and grow 0.6 percent, or 100 jobs, in 1990.

The decline in manufacturing and construction employment, and the recent troubles of the finance industry's savings and loan institutions, impacted employment in the finance, insurance, and real estate (FIRE) industries. FIRE employment will shrink 4.9 percent, or 600 jobs, this year. But with a better outlook for manufacturing and construction next year, FIRE is expected to grow 1.7 percent, or 200 jobs, in 1990.

Industries that will create wage and salary jobs in the private sector are mining, trade, and services. Mining will add 300 jobs in 1989 after creating 200 jobs in 1988. Even though the increase is minimal, at least it helps make up for the loss of some jobs in the durable goods sector of manufacturing. In 1990, mining will add about 100 jobs.

Services and trade will create most of the jobs in 1989 and 1990 in Pima County. Services will grow 3.4 percent, or 2,300 jobs, in 1989 and will have a similar growth rate -- 3.2 percent, or 2,200 jobs -- in 1990. Hotels and lodging places, and health services will account for most of that growth.

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--Jalal Ahmad, Ph.D.
RA Economist

Trade, on the other hand, will grow at a moderate rate of 2.3 percent, or 1,300 jobs, in 1989, followed by 2.2 percent growth in 1990. The wholesale trade sector, after declining 6.7 percent in 1988, will grow 1.4 percent in 1989, or about 100 jobs.

Weak employment growth in trade is due to overall slower economic activity in the Tucson metropolitan area and partially to a weak Mexican economy and peso. In 1989, the retail trade sector will grow 2.6 percent, or 1,300 jobs, and 2.1 percent in 1990. Most of that job growth should come from eating and drinking places, followed by department and hardware stores.

Employment in government is expected to grow at a moderate rate -- 2.1 percent -- this year. A net addition of 500 jobs should come from the state and local government sector.

In summary, 1989 will be the bottom of the downturn in construction and manufacturing industries in the Tucson metropolitan area. By 1990, both industries will grow again, albeit at a slower rate.

In 1989, total wage and salary employment will grow 1.0 percent, or 2,400 jobs, followed by 2.2 percent, or 5,500 jobs, in 1990. This outlook could be less promising if both inflation and interest rates go up, or if the national economy suffers a general recession.

--Jalal Ahmad, Ph.D.
RA Economist

Rural Counties Outshine Urban Cousins Thanks to Service-Producing Sectors

The economic outlook for Nonmetropolitan Counties (all but Maricopa and Pima) continues to be brighter than that for Arizona's metropolitan areas.

Based on wage and salary employment statistics for the first six months of 1989, overall employment growth for the year is forecast to be 2.7 percent (6,300 jobs). About the same growth rate (6,400 jobs) is forecast for 1990.

If these projections hold true, then Nonmetropolitan Counties will have chalked up five consecutive years of higher wage-and-salary employment growth rates than the state's two metropolitan counties (Maricopa and Pima). In creation of actual wage and salary jobs, however, Nonmetropolitan Counties (12,700) come out on top of Pima County (7,800), but are far behind Maricopa County (32,100).

Following the lead of the nation and the state's metropolitan counties, most of the employment gains in Arizona's rural counties will be derived from service-producing industries.

The service-producing industries -- transportation, communication, and public utilities (TCPU); trade; finance, insurance, and real estate (FIRE); services; and government -- are forecast to grow 3.1 percent (5,800 jobs) in 1989. In 1990, growth should be slightly less -- at 2.8 percent (5,500 jobs). The goods-

(Continued on page 22)

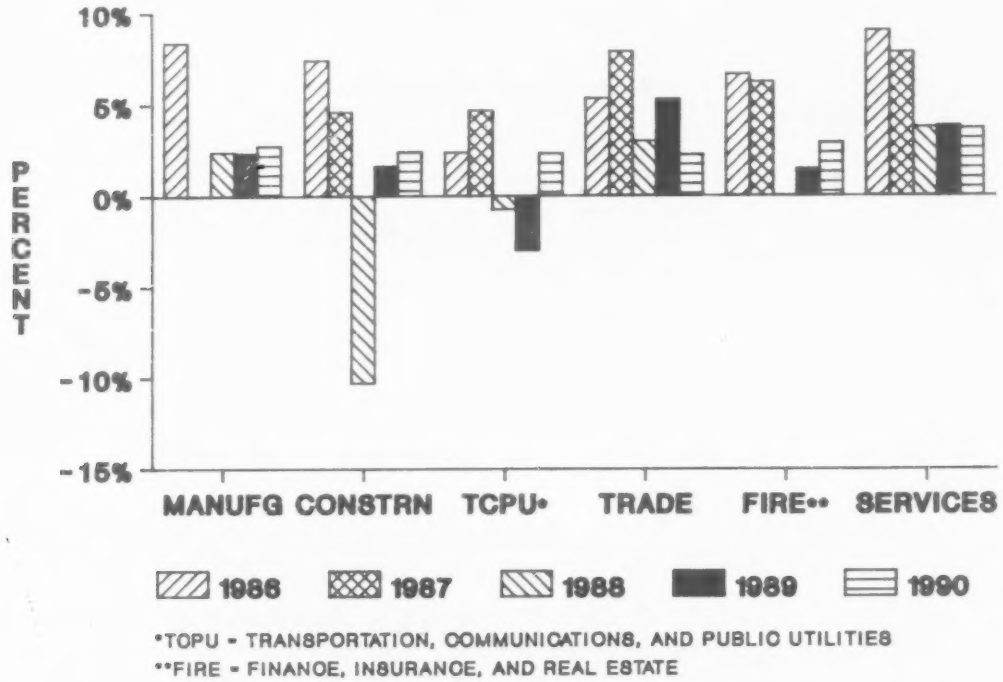

Figure 7. Nonmetropolitan Counties Employment Growth Rates in Selected Industries, 1981-1990

Table 4. Nonmetropolitan Counties Economic Forecasts (Annual Averages, in Thousands)

	1988	Growth Rate	1989	Growth Rate	1990	Growth Rate
Labor Force	314.4	3.4%	327.6	4.2%	337.0	2.9%
Unemployed	35.4	6.9	33.5	-5.4	38.5	14.9
Unemployment Rate	11.3%		10.2%		11.4%	
Total Employment	279.0	2.9	294.1	5.4	298.5	1.5
Total Wage and Salary Employment	232.2	2.3	238.5	2.7	244.9	2.7
Manufacturing	21.2	2.4	21.7	2.4	22.3	2.8
Mining	9.5	3.3	9.2	-3.2	9.3	1.1
Construction	12.2	-10.3	12.4	1.6	12.7	2.4
TCPU*	13.3	-0.7	12.9	-3.0	13.2	2.3
Trade	54.8	3.0	57.7	5.3	59.0	2.3
FIRE**	6.8	0.0	6.9	1.5	7.1	2.9
Services	49.8	3.8	51.7	3.8	53.6	3.7
Government	64.8	4.2	66.1	2.0	67.9	2.7

* TCPU = Transportation, Communications, and Public Utilities.
** FIRE = Finance, Insurance, and Real Estate.

NOTES: Totals may not add due to rounding.

SOURCE: Arizona Department of Economic Security, Research Administration, August 1989.

(Continued from page 21)
producing industries -- manufacturing; mining; and construction -- are forecast to grow at a sluggish 0.9 percent (400 jobs) in 1989. Growth expectations for 1990 are considerably better -- at 2.3 percent (1,000 jobs).

The unemployment rate for the first half of 1989 in Arizona's rural counties averaged 9.6 percent. This is down from the 11.3 percent experienced in 1988. However, forecasted higher unemployment in the second half of 1989 will push up the unemployment rate for the year to 10.2 percent. The rate is expected to increase further in 1990 to 11.4 percent.

Nonmetropolitan Counties' manufacturing employment grew 500 jobs in 1988. The 1989 forecast indicates manufacturing will have the same increase, or a growth rate of 2.4 percent. Forecasts for 1990 look even better with a growth rate in the 2.8 percent range (600 jobs).

RA's forecast reveals that while most of 1989's growth will stem from the nondurable-goods sector, 1990's growth will be in the durable-goods sector. While the metropolitan areas are experiencing sluggish or even negative manufacturing employment growth, the rural counties are holding their own in that area.

Mining in rural Arizona, which has been enjoying employment expansion for several years, will contract 3.2 percent (300 jobs) in 1989. Mining employment in 1990 is forecast to be up 1.1 percent (100 jobs). Some of the employment decrease in 1989 is attributable to one company having to lay off employees while it restructures its finances and changes mining methods.

Unlike the rest of Arizona, Nonmetropolitan Counties are exper-
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iencing net increases in construction employment. The forecast for 1989 is for 1.6 percent growth in employment (200 jobs), with expectations for 1990 slightly better at 2.4 percent (300 jobs).

TCPU will be the only service-producing industry to lose employment in 1989. A decrease of 3.0 percent (400 jobs) is expected in 1989. All the losses are in public utilities and are the result of the completion of several large projects. In 1990, the forecast is for 2.3 percent employment growth (300 jobs).

Employment in trade, which is responsible for more than one-quarter of Nonmetropolitan Counties' total employment, is expected to continue to do well the next two years. Employment growth projections for trade in 1989 are a robust 5.3 percent (2,900 jobs), followed by a slower, but solid, 2.3 percent (1,300 jobs) in 1990.

Last year did not provide any employment growth for FIRE. However, modest growth of 1.5 percent (100 jobs) is expected in 1989 and projections for 1990 are almost double -- 2.9 percent (200 jobs).

Employment in FIRE is greatly influenced by construction activity and interest rates. With interest rates coming down and construction activity increasing, FIRE is expected to continue to enjoy employment gains.

Compared to a high growth rate in the mid-1980s, services' employment rate slowed substantially in 1988. And with the domestic economy pre-

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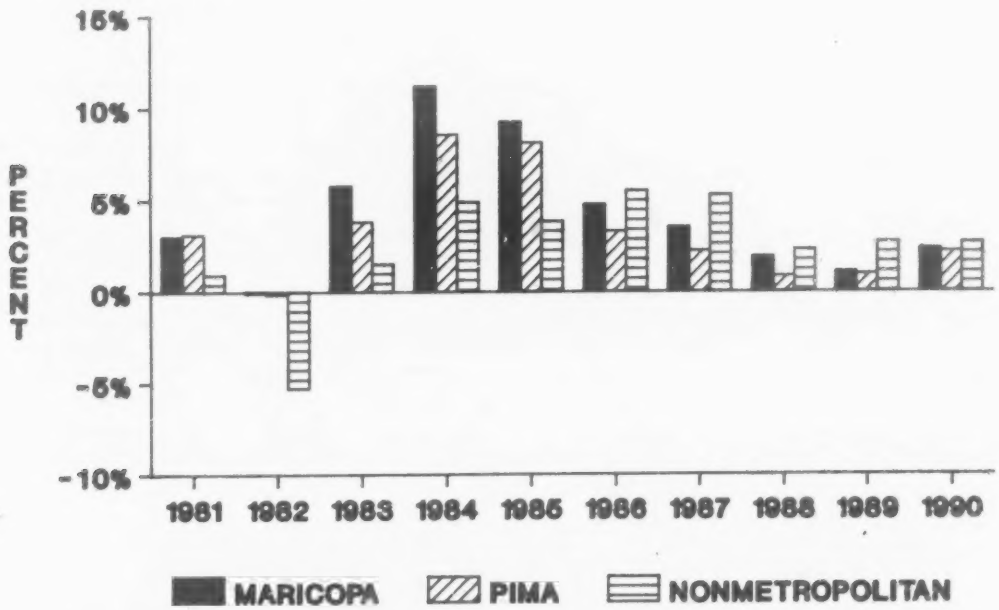

Figure 8. Metropolitan Counties (Pima and Maricopa) vs. Nonmetropolitan Counties Wage and Salary Employment Growth Rates, 1981-1990

(Continued from page 23)
sently growing slowly, 1989 employment growth for services in Arizona's rural counties is expected to be a moderate 3.8 percent (1,900 jobs). Not much will change in 1990 as expectations for growth run at 3.7 percent (1,900 jobs).

Although government, Nonmetropolitan Counties' largest employer, is relatively stable, the levels of federal, state and local budgets can greatly affect government employment growth. And recent budget constraints and slower population growth have resulted in lower growth in government employment. RA's forecast calls for 2.0 percent (1,300 jobs) growth in 1989, followed by a slight acceleration to 2.7 percent (1,800 jobs) in 1990.

... the rural areas have shown more resilience than the urban areas, and the outlook for Nonmetropolitan Counties remains positive.

--Marc A. Marra
RA Economist

With growth slowing in the United States and Arizona's metropolitan areas, the state's rural counties are following suit. However, the rural areas have shown more resilience than the urban areas, and the outlook for Nonmetropolitan Counties remains positive. In addition, rural counties with the greatest diversification of industries will have the most to gain in the future.

--Marc A. Marra
RA Economist

BLS: Manufacturing Accounted for Half of '88 Mass Layoffs

The U.S. Department of Labor's Bureau of Labor Statistics reported in early August its program on mass layoffs showed that 450,300 workers in 1988 were part of mass-layoff actions in 1,951 business establishments in the 42 states that provided data. These layoffs occurred in 2,322 separate layoff events. More than three-fourths of the workers (349,395 persons) filed claims for unemployment insurance benefits.

The Mass Layoff Statistics (MLS) program is a federal-state cooperative effort that covers layoffs of at least 31 days, involving 50 or more employees who filed initial claims for unemployment insurance benefits over a consecutive three-week period. About 13 percent of the layoff events in 1988 resulted in closure of the entire establishment.

The 1988 data show that mass layoffs in manufacturing industries continued by far to exceed those in other industries, accounting for slightly more than half of all layoff events. More than half of the manufacturing layoffs, in turn, occurred in the durable goods sector, led by transportation equipment and electrical equipment industries. In nondurable goods, there was an even greater concentration of layoff events, with food processing and apparel manufacturing accounting for two-thirds of the workers who lost jobs.

In nonmanufacturing establishments, construction had the most layoffs, followed by services and trade. Taken together, establishments in these three industries accounted for seven out of 10 nonmanufacturing layoff events.

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For the same period in Arizona, 36 percent of mass-layoff events were in manufacturing industries, 39 percent in nonmanufacturing industries, and 25 percent in the agricultural sector.

"Seasonal work" and "contract completion" were given as reasons for about 38 percent of the U.S. layoff events. Outside of these two categories where layoffs are typical and usually expected, "slack work" was the most frequent other reason cited (19 percent), followed by "business ownership change" (4 percent) and "bankruptcy" and "domestic relocation" (3 percent each).

Other data highlights were:

- More than half the layoff events reported in the 42 states took place in 10 states -- Alabama, Arizona, Florida, Louisiana, Massachusetts, Minnesota, New Jersey, Pennsylvania, Texas, and Wisconsin.
- Of the 349,395 initial claimants for unemployment compensation in the 42 states, 7 percent were Hispanic, 41 percent were women, and 13 percent were at least 55 years of age. In 36 states reporting data for blacks, their proportion of initial claimants was nearly 17 percent.
- Reflecting the overall economic growth, the number of businesses with layoffs, the number of layoff situations, and the number of workers separated each declined by around 10 percent in the 29 states for which data are available for both 1987 and 1988.

Currently, 49 states and the District of Columbia are participating in the program.

--U.S. Department of Labor, Bureau of Labor Statistics

New Developments

"New Developments" is featured each month as a service to our readers. This section is a compilation of public announcements and articles from newspapers and periodicals about events significant to Arizona labor markets. Due to space limitations, however, an exhaustive list of business news is not possible. In addition, the LMI Newsletter is not responsible for incorrect information reported by these sources.

MANUFACTURING - Fourteen companies from Arizona and other states have signed letters of intent to participate with **Arizona State University** in building a $36 million computer chip factory and research center. The group, called the **Semiconductor Manufacturing Automation Consortium (SemiMac)**, hopes the factory will improve the companies' competitiveness in the international market -- by cutting costs and developing improvements in the speed of manufacturing chips. SemiMac could begin operation as early as Oct. 1 and plans to open the factory on five acres at the ASU Research Park in Tempe by 1991. The plant could employ between 50 and 100 permanent workers.

Imperial Chemical Industries PLC expects to employ 200 people when it opens a 200,000-square-foot chemical plant in Chandler in 1991. The facility will be leased by ICI Composites of Tempe, a subsidiary of London-based ICI, one of the largest chemical companies in the world.

Forty-six employees at an **American Telephone & Telegraph (AT&T)** cable factory in west Phoenix have been laid off in relation to the dropping of product line. The cutback leaves AT&T with 2,300 workers at the 51st Avenue and Van Buren Street plant.

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MINING - Two Arizona mines have been acquired by Tucson-based **Arimetco Inc.**, which plans to use a high-tech process -- extraction-electrowining -- to produce low-cost copper. Arimetco expects the **Johnson Camp** mine near Benson to start operation by early next year and produce 25,000 pounds of ore a day, while an estimated production of 6,000 pounds a day is expected at the **Emerald Isle** mine near Kingman when operations begin later this year. About 35 miners will be employed at the Johnson Camp mine.

CONSTRUCTION -- **Sun Cor Development Co.**, a subsidiary of Pinnacle West Corp., has broken ground on **Talavi**, a 125-acre development at Bell Road and 59th Avenue. Talavi will include a 65-acre business park; 28-acre community shopping center; and hotel, garden office, and restaurants.

TRADE -- Phoenix-based **SupeRx Drug Stores**, which has 32 outlets in the Valley, plans to open 12 to 14 "Express" stores over the next year. The smaller stores -- 1,800 vs. 8,000-12,000 square feet -- are similar to convenience stores and designed for quicker service.

One of the nation's largest consumer-electronics and appliance retailers, **Circuit City**, will open two 33,000-square-foot stores in the Valley by fall. The "Superstores," which will be located at two malls -- **Metrocenter and Scottsdale Pavilions** -- are expected to gross $17 million a year in sales. Richmond, Va.-based Circuit City, which has 133 stores, will wait until February before announcing further expansion plans.

Meanwhile, the competitiveness of the consumer-electronics business took its toll on a major chain in Arizona. Three creditors of **Home America TV Appliance & Audio**, which operated stores in Phoenix, Tucson, and Yuma, have filed a request in federal Bankruptcy Court to take over sale of the company's assets. Home America, which owes the creditors $10 million, closed its 24 stores in Arizona, Texas and Las Vegas in mid-August, then began liquidation of its assets.

Mesa-based **Mega Foods** is adding fuel to the grocery store wars with the opening of new stores in Glendale and Yuma with plans for six more stores (five in the Valley and one in Flagstaff) in Arizona next year. In addition, Mega, which now has seven stores, is negotiating to open eight other stores throughout the state in the future.

FINANCE, INSURANCE and REAL ESTATE - **Home sales in the Phoenix area** rose 16 percent in the second quarter of this year, according to the Arizona Regional Multiple Listing Service. Statewide sales, however, dropped 14.2 percent during that same period. Part of sales increase in the Valley is attributed to a 2 percent drop in home prices -- from $79,000 to $78,200 -- from the previous quarter.

SERVICES AND MISCELLANEOUS - The sale of **Ramada Inc.'s** worldwide hotel chain will mean the loss of jobs for half of Ramada's 350 employees at its company headquarters on East Van Buren Street in Phoenix. New owners **New World Development Co. Ltd. of Hong Kong and Prime Motor Inns of Fairfield, N.J.**, will begin laying off an estimated 175 workers when the transaction is completed in mid-September. The sale, however, will not affect 350 workers at the chain's reservations center in Phoenix.

Marriott Corp. has begun construction of its fifth Courtyard hotel in the Phoenix area. The 155-unit **Camelback Courtyard**, to be located

(Continued on page 27)

(Continued from page 26)
near 20th Street and Camelback Road, is expected to be completed by next July. Marriott plans to build an additional six to eight hotels in Arizona during the next five years.

Parks Inns International of Dallas expects to have five hotels in the Phoenix area by mid-1990. Parks Inns, which also plans to open hotels in Tucson and Flagstaff, is currently looking to buy or franchise existing properties in the Phoenix area, as well as finding a developer to build hotels.

Camelback Hospitals has recently let go 60 workers due to shortened patient stays. Camelback, which now employs 950 workers at its four psychiatric hospitals, three live-in treatment centers, and 12 outpatient clinics, says the time of stays this year has dropped 30 percent compared to 1988. Pressure from insurers and other payers to shorten stays is blamed for the dropoff.

Declines in time of patient stays and the loss of business with Intergroup, southern Arizona's largest health maintenance organization, are blamed for the layoff of 37 employees at **Tucson Medical Center.** The reductions, part of a $5.1 million cost-cutting measure, cover a variety of positions, including support staff and nurses.

A $10.2 million rehabilitation facility, which will provide 150 jobs, is planned for northwest Tucson. **Southern Arizona Rehabilitation Hospital,** which will specialize in helping patients with traumatic injuries, will open in a year and be built next to Northwest Hospital, 6200 N. La Cholla Blvd. Both hospitals are owned by **HealthTrust Inc. of Nashville, Tenn.**

TRANSPORTATION, COMMUNICATIONS AND PUBLIC UTILITIES (TCPU) -- **Lockheed Corp.** expects to open an aircraft maintenance and modification center at **Tucson International Airport** by next June that will initially employ 190 people, and employment may grow to 600 within three years. Workers will be sought from the Tucson-area labor force. Lockheed, which signed a 30-year lease with the Tucson Airport Authority, says the center will provide work on commercial aircraft, similar to a facility it operates in Greenville, S.C.

Sky Harbor International Airport is seeking non-stop air service between Phoenix and Amsterdam by 1992. In current talks between the United States and the Netherlands, Sky Harbor and Schiphol Airport in Amsterdam are pushing for daily service between Phoenix and Amsterdam, which is expected to translate into a $52 million annual windfall for the Arizona economy.

American Telephone and Telegraph Co. (AT&T) plans to open a directory assistance center in Tucson that will initially employ between 90 and 110 people. The facility, which will open in the first quarter of 1991, will service calls from 11 western states.

GOVERNMENT -- **Gordon-Darby Inc.** of Louisville, Ky., has been awarded a $90 million, 7½-year contract to run Arizona's vehicle-emissions testing beginning in 1991. The state Department of Environmental Quality chose Gordon-Darby over Hamilton Test Systems, Inc. of Phoenix, which has overseen the program since 1976.

GENERAL - Only 20 percent of Arizona's jobless collected **unemployment insurance** in 1988, ranking 43rd among the 50 states and District of Columbia. A report by the **Center on Budget and Policy Priorities** showed 82,700 of the state's 104,156 unemployed did not qualify or did not apply for unemployment insurance (UI), or exhausted their UI benefits.

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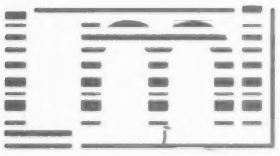

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